services much sooner than if the ILECs are constrained by unnecessary unbundling requirements."[116]

For all of the foregoing reasons, the Commission should reject CLEC arguments that ILECs should be required to provide unbundled access to equipment used to provide advanced telecommunications services, including DSLAMs, packet switches, and other new technologies.

c. Local Loops.

In its comments, Ameritech acknowledged that loops satisfy the "impair" standard under section 251(d)(2) in many geographic markets at this time. It and numerous other commenters, however, demonstrated that competitive alternatives to ILEC copper loops (such as fixed wireless, cable, and competitive wireline loops) are rapidly being developed and deployed.[117] Ameritech showed, for example, that CLECs have already deployed significant alternative local loop facilities to serve business

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[116] Information Technology Industry Council at 8.

[117] *See* Ameritech at 100-02. *See also, e.g.*, BellSouth at 63; US West at 36; WinStar at 4 (noting that wireless telephony competes head-to-head with wireline telephony by offering an innovative, efficient and cost-effective alternative traditional wireline services); Teligent at 7 (noting that fully facilities-based carriers like Teligent can now bring their own facilities all the way to a customer's premises); MediaOne at 1-2 (noting that MediaOne already is offering integrated voice and broadband services to a diverse base of residential subscribers, including customers in urban and rural areas, and plans to make such services available to over 90 percent of the homes passed by its cable systems by 2001); Cox Communications at 2 (stating that Cox plans to deploy circuit switched digital local telephone services throughout its clustered cable systems, which now serve roughly four million customers). Remarkably, AT&T attempts to downplay the competitive significance of cable telephony in this proceeding, but elsewhere has boasted that "IP telephony is here." *Compare* AT&T at 70 ("Cable mergers may accelerate cable telephony deployment, but widespread deployment of that technology is a few years away.") *with UNE Fact Report* at III-21, quoting *AT&T Proposes a Deal to Buy TCI*, CNN Moneyline News Hour with Lou Dobbs, June 24, 1998 (quoting AT&T's Chairman)). *See also* S. Schmelling, *Ghostbusting*, Telephony, Apr. 12, 1999 (reporting that AT&T plans to begin deploying IP telephony on TCI's systems in 1999); C. Mason, *Where Are CATV's Trump Cards?*, America's Network, Jun. 1, 1998 (reporting that TCI projected that, by the year 2000, 90 percent of its cable plant will be upgraded to two-way capability).

customers in dense wire centers serving 40,000+ lines, suggesting that efficient CLECs could reasonably and practicably deploy their own loops in those wire centers.[118]

The Commission itself has acknowledged that the advent of these competitive "last mile" facilities. Just this past February, it reported to Congress that "the preconditions for monopoly appear absent" in the consumer market for broadband services because of the development of alternative facilities "to serve the last mile to the home," including "DSL, cable modems, utility fiber to the home, satellite and terrestrial radio."[119] Each of these technologies readily could be used to provide competitive local exchange service in addition to broadband services. Indeed, the Commission has acknowledged as much, stating "new broadband technologies might even be capable of creating competition for the telephone and cable incumbents in the core markets of narrowband telephone and MVPD."[120] Thus, as the Commission recognized, the deployment of these alternative facilities "opens the possibility of intermodal competition, like that between trucks, trains, and planes in transportation."[121]

Given the already widespread, and increasingly rapid, deployment of alternative loop facilities, the Commission should begin to tailor its unbundling requirements to

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118 Ameritech at 101-02.

119 *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Report, CC Docket No. 98-146, FCC 99-5 at paras. 46-48 (rel. Feb. 2, 1999) (*Advanced Services Report*). Likewise, last year, in the *Third CMRS Report*, the Commission recognized that fixed wireless local loops are rapidly offering a "replacement for the 'last mile' of copper wire." *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Third Report*, 13 FCC Rcd 19746, App. F at F-1 (1998) (*Third CMRS Report*).

120 *Advanced Services Report* at 51.

121 *Id.* at para. 48.

mandate unbundled access to ILEC loops only in those areas where alternative "last mile" facilities are not reasonably and practicably available. For example, the evidence in the record suggests that efficient CLECs could reasonably and practicably deploy their own loops, and therefore would not be impaired without access to ILEC loops, in dense wire centers.[122] And as alternative loop technologies develop further and are deployed more widely, access to ILEC loops will be increasingly unnecessary – at which point ILECs should no longer be required to provide unbundled access to local loops ubiquitously or to all carriers.

Ameritech recognizes that some carriers may, nevertheless, continue to need access to ILEC copper loops to provide certain types of services even if alternative loop facilities become available generally. For example, data CLECs may continue to require access to ILEC loops to provide xDSL service even after cable, fixed wireless loops, wireless telephony, and other alternative "last-mile" facilities render access to ILEC loops unnecessary for the provision of competitive local exchange service. In that event, the Commission should limit access to unbundled local loops only to those carriers that offer xDSL service, or xDSL service in combination with voice services, and should limit their use of such loops to those applications.

Tailoring the unbundling rules in this manner is not only permissible under section 251(d)(2),[123] it also would be entirely consistent with the Court's decision. As

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[122] Ameritech at 102.

[123] As Ameritech observed in its comments, the Act not only does not prohibit such limiting the use of network elements to specific services, it expressly contemplates this type of limitation insofar as section 251(d)(2)(B) speaks of "the failure to provide access to . . . network elements would impair the ability of the telecommunications carrier seeking access to provide *the services* its seeks to offer." Ameritech at 66.

Ameritech observed in its comments, "by carefully crafting unbundling requirements and limiting those requirements to contexts in which unbundling is actually needed, the Commission would further the pro-competitive policies of the Act by spurring facilities-based competition."[124]

1. Loop Conditioning.

A few parties raise loop conditioning issues that were resolved by the Commission in its *Local Competition Order*.[125] These parties request the Commission to require that "conditioned loops be made available on request."[126] However, the nature and extent of an incumbent LEC's duty to provide conditioned loops has long been settled. Consequently, there is nothing more the Commission needs to do in this Docket, except to reaffirm that its existing definition of local loops includes technically feasible conditioning that can be accomplished by removing load coils and bridge taps from existing copper facilities.[127]

As discussed in detail in Ameritech's comments in response to the Commission's *706 NPRM*, Ameritech already conditions loops to support digital conductivity to the extent technically feasible.[128] As the Commission recognizes, however, not all loops are

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124 *Id.*

125 *Local Competition Order*, 11 FCC Rcd at15691.

126 KMC at 23. *See also* ALTS at 41, Level 3 at 24, NEXTLINK at 20-22, Rhythms at 13-16.

127 *Local Competition Order*, 11 FCC Rcd at 15691-92.

128 Ameritech Comments filed in *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147 (*706 Docket*) September 25, 1998, at 9-17.

capable of supporting high-speed digital transmission.[129] For example, because xDSL requires an unbroken, clean copper pair, loops passing through a digital loop carrier cannot support xDSL service. But even where a compatible loop is not currently available, Ameritech will provide a conditioned loop by assembling spare copper components into a compatible loop where feasible and facilities permit. Ameritech thus goes beyond what even ALTS requests, and not only provides "unbroken copper loops running alongside" non-copper facilities, but also will assemble such loops where copper components exist.[130] Even ALTS admits that using alternate copper facilities is "acceptable."[131]

Even so, a few parties ask the Commission to require incumbent LECs to "perform all actions necessary to condition loops to provide the service desired by the requesting carrier."[132] However, that request is misplaced and exceeds the Commission's authority under the 1996 Act. The Commission's Rule 51.311(c) was vacated by the Eight Circuit Court of Appeals because it required incumbent LECs to provide service "superior in quality to that which the incumbent LEC provides to itself." As the Court explained "subsection 251(3)(3) implicitly requires unbundled access to an incumbent

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129 *Local Competition Order*, 11 FCC Rcd at 15691-92.

130 ALTS at 45.

131 ALTS still frets about "special construction costs to construct a copper loop." *Id.* Ameritech observes, however, that it does not assess special construction charges to migrate a loop to a spare copper pair; it only assesses such charges when no spare copper facilities are available. Ameritech further notes that it assesses precisely the same charges against Ameritech Advanced Data Services (its advanced data services subsidiary) to the extent it requires a new loop to offer DSL service. In any event, the Commission specifically determined that ILECs should recover the costs associated with separating out individual loops from DLC facilities from requesting carriers. *Local Competition Order*, 11 FCC Rcd at 15692-93.

132 *See* NEXTLINK at 21.

LEC's *existing* network -- not to a yet unbuilt superior one." Further, concepts of nondiscrimination do not require that incumbent LECs "cater to every desire of every requesting carrier."[133]

Thus, what a requesting carrier may request is the conditioning that a incumbent LEC will perform for itself and its customers on existing loops in its network. Today, that generally means removing bridge taps and load coils from continuous copper loops. However, it does not require that incumbent LECs construct special facilities to meet a request, or install special equipment to provide levels of transmission that they do not support for their own customers. As such, the Commission should affirm its existing definition and reject any calls for superior service or transmission parameters or special equipment or facilities.

The only other real issue concerning conditioning seems to be that a few parties desire to obtain conditioning at no charge.[134] At the outset, it is important to note that it is premature to address any pricing issues until the Eight Circuit Court of Appeals rules on the validity of the Commission's pricing rules. Moreover, pricing issues exceed the scope of this proceeding. However, Ameritech would like to clarify that it assesses charges to provision and condition xDSL compatible unbundled loops only when no xDSL compatible loop exists. Thus, requesting carrier only pay for conditioning where Ameritech actually performs conditioning work.

Rhythms requests that the Commission "affirmatively act to limit the loop conditioning fees currently applied by incumbents" or to require ILECs to condition

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133 *Iowa Utilities Bd. v. F.C.C.*, 120 F3d 753, 812-813 (8th Cir. 1997).

134 *See* NEXTLINK at 21 and Rhythms at 15.

loops "generally at no cost – as part of the basic forward looking cost of [a] loop." Rhythms wrongly reasons that incumbent LECs regularly performs conditioning "for itself, generally at no cost" and should do the same for CLECs.[135] Rhythms is mistaken, conditioning costs are either included in the retail rates that incumbent LECs charge their end user customers, or they are recovered as special construction charges. Moreover, the Commission has already determined that "a requesting carrier would . . . bear the cost of compensating the incumbent LEC for such conditioning."[136]

ALTS argues that it should get conditioning for free because analog loops will not be deployed as the most efficient technology and that there should be a "presumption that all loops in a forward looking cost study will be conditioned."[137] However, it is not true that all loops need to be digital or conditioned on a forward-looking basis. Rather, for many applications, especially voice, unconditioned loops are more than adequate and will likely remain so for the foreseeable future. The cost of conditioning a loop therefore is an appropriate forward-looking cost because conditioning reflects the optimal method of enabling existing copper facilities to transmit digital signals. Since CLECs pay cost-based rates for network elements, they must recognize that those rates must include all forward-looking costs they cause, even if in some cases those costs are significant. They cannot not have it both ways – pay cost-based rates when costs are low and evade them when costs are high. There can be no free ride under section 252(d)(1), nor does the Commission's Local Competition Order permit one.

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135 *Id.*

136 *Local Competition Order*, 11 FCC Rcd at 15692.

137 ALTS at 94-95.

NEXTLINK takes a different approach. It asserts that the "provision of clean copper loops should be part of the provision of unbundled loops at TELRIC prices," but then argues that the " Commission should recognize that conditioning loops in order to support the desired CLEC service is inherent in the element and captured in the TELRIC price." Although it is not clear what NEXTLINK means, it is mistaken to the extent that it is arguing that these costs are already in the TELRIC rates for unbundled loops. They are not. Nor should they be built into those rates so that CLECs that do not order conditioning are required to subsidize those that do.

2. Subloop Unbundling.

Several parties resurrect their request that the Commission add subloop unbundling to the national uniform list of network elements.[138] Basically, these parties claim that subloop unbundling is "necessary" in order to "bypass" portions of the ILEC's loop plant.[139] They assert that portions of the ILEC's loop may be "unsuitable for the provision of some advanced services." In addition, they claim that some advanced services require "short loop lengths" and that CLECs may need to access these "local loops at points closer to the end user."[140]

These requests should be denied for two reasons. First, subloop unbundling does not meet the impair standard because no carrier has needed it to offer any service. The request is based upon purely speculative hypothetical uses that have not materialized in the real world. Second, even if subloop unbundling somehow meets the impair standard,

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138 ALTS at 46-48, KMC at 23-25, Level 3 at 22-23, MCI at 48, NEXTLINK at 30-31, NorthPoint at 16, RCN at 32-33, Sprint at 35.

139 *See e.g.* RCN at 32 and KMC at 24.

140 *Id.*

its proponents have once again failed to demonstrate that the technical, administrative and operational and network reliability issues associated with subloop unbundling identified by the Commission in 1996, have been resolved.[141] The fact is those issues have not gone away, nor have they been resolved. Although these parties provide word descriptions of where they may want to interconnect, no party provides any detail regarding what it is seeking, or shows that it is technically, administratively or operationally feasible on a national basis.

As the Ohio Commission tellingly notes, Ameritech has been offering subloop unbundling on a bona fide request basis for several years, "[y]et, to date, there have been no subloop BFRs."[142] The same situation exists in the other states in which Ameritech provides local exchange service – no one has requested subloop unbundling. Clearly, a form of unbundling is not necessary if after three years not a single party has requested it. Carriers that offer advanced services are either using the entire loop or installing their own facilities. If in the future some application develops that would justify subloop unbundling under the impair standard, the procedures are in place for subloop unbundling requests to be examined on a case-by-case basis at the state level.

In the *Local Competition Order*, the Commission "decline[d] to identify feeder, feeder/distribution, interface (FDI), and distribution components of the loop as individual network elements," because it concluded that "proponents of subloop unbundling [had] not address[ed] certain technical issues raised by incumbent LECs concerning subloop unbundling." In the *Local Competition* proceeding, Ameritech and others developed in

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141 *Local Competition Order*, 11 FCC Rcd at 15696.

142 PUCO at 18.

detail the technical, administrative, operational and network reliability issues associated with subloop unbundling. Ameritech further demonstrated that the necessary technical standards, specifications and operational procedures had not yet been developed. Moreover, Ameritech pointed out that, for certain loop types, subloop unbundling is not feasible at all and that in many locations there is not sufficient space to permit interconnection.[143] Ameritech also attached to its Comments a White Paper by technical experts at Bellcore (now Telcordia) validating and explaining these concerns in greater detail.[144] Ameritech will not repeat these arguments or the contents of the Paper here, but incorporates them by reference.

Now more than three years later, the proponents of subloop unbundling still ignore these technical, administrative, operational and network reliability issues. They do not acknowledge, let alone purport to resolve, the Commission's concerns about the "loop maintenance and network reliability" matters arising from subloop unbundling.[145] As the PUCO observes, "[t]o date," proponents of subloop unbundling have offered no "evidence that copper loops can be unbundled in a technically feasible manner."[146] But ignoring loop maintenance and network reliability issues will not make them go away. Until these issues are resolved, the Commission should reject calls to require subloop unbundling.

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143 Ameritech Comments filed May 16, 1996 at 37-42.

144 *Issues Concerning the Providing of Unbundling Subloop Elements by Ameritech*, May 16, 1996. This Report conclude that subloop unbundling "will create enormous technical, administrative, and operational challenges that need to be contained by judicious limitation of subloop interconnection . . . ." *Id.* at 5.

145 *See Local Competition Order*, 11 FCC Rcd at 15696.

146 PUCO at 17.

The Commission should decline to mandate subloop unbundling at the national level because it does not meet the impair standard, and because numerous technical, administrative, operational, and network reliability issues have not yet been addressed. Rather than mandate subloop unbundling, it should continue to leave subloop for development and analysis based upon concrete requests at the state level on a case-by-case basis. Then the impairment standard can be properly applied against real facts, rather than mere speculation. Moreover, the state commissions can ascertain if the technical, administrative, operational and reliability issues relating to that request have been adequately resolved.

3. Intra-building Wiring.

Several parties request that the Commission find that ILEC-owned wiring on customer premises is a network element subject to mandatory unbundling under section 251(c)(3) of the 96 Act. The requests vary in their detail, but none of them provide adequate justification for finding that ILEC-owned wire in customer buildings automatically satisfies the statutory "impair" standard on a national basis and can be added to the national uniform list of network elements.

Level 3 wants all ILEC-owned customer premises wiring to be classified as a network element—even if it is on the customer's side of the demarcation point.[147] CompTel, in particular access to ILEC riser cable in apartment buildings and

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[147] *Id.* at ¶ 27. The Commission has defined the demarcation point as "The point of demarcation and interconnection between telephone company communications facilities and terminal equipment, protective apparatus or witing at a subscriber's premises." 47 C.F.R.§ 68.3. It cannot refer into an individual customer's premises than 12 inches from where the wire enters the premises "or as close thereto as practicable." *Id.*

other multiple dwelling units (MDUs"), similarly wants the Commission to include all ILEC-owned inside wire within the definition of the network interface device ("NID") so that "competitors may obtain access to the customer by cross-connecting at the ILEC NID."[148] ALTS's request is limited to multi-tenant environments ("MTEs"); where it asks the Commission to require that ILEC-owned intra-MTE wiring be unbundled.[149] This claim was echoed by WinStar, which asks the Commission to declare that "wiring, terminal blocks, and other facilities owned and/or controlled by ILECs within MTEs are network elements, regardless of which side of the demarcation point they happen to fall."[150] Finally, a more focused claim was raised by Teligent, which first asks that the Commission re-designate the minimum point of entry ("MPOE") as the demarcation point in all commercial and residential MTEs.[151] Alternatively, it asks that the

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148 CompTel at 36. *See also* Cable & Wireless at 35-35.

149 ALTS at 70-72. Although it is more focused, it is nonetheless extreme. ALTS says "that the Commission also must require ILECs to make readily available on their websites, reports indicating the buildings in which they own intraMTE wiring." This is somewhat incredible given that, if a CLEC is interested in serving customers in a building, it can discuss the issue with the owner who would know, not only who owns the riser, but also the terms under which the CLEC could install its own riser if it wanted to do so.

150 WinStar at 7. WinStar also wants the Commission to clarify that ILECs (and corporate affiliates – such as affiliated cellular companies!) must provide competitors with access to in-building conduit and riths-of-way. This astonishing request is completely unsupported by statutory language – both as to the nature of network elements and as to the entities bound by the unbundling obligations of section 251(c)(3). While nondiscriminatory access to poles, conduits, ducts, and rights-of-way is a section 271 checklist item for BOCs, that fact alone indicates that Congress didn't intend that it be treated as a network element under section 251(c)(3) since compliance with section 251(c)(3) is a separate checklist item. Further, the 96 Act's unbundling obligations fall on incumbent LECs – not on their cellular affiliates.

151 Teligent at 2.

Commission require the unbundling of MTE "risers" on the ILEC's side of the demarcation point.[152]

All of these claims miss the mark – i.e., none of them make a case for the Commission to find that these facilities pass the impair standard in such a vast number and high percentage of cases that they can be included on the national uniform list of network elements.[153]

First, with respect to ILEC-owned wire located on the customer's side of the demarcation point, a requirement that ILECs make it available as a network element to any CLEC either is unnecessary or would conflict with the Commission's prior rulings on "inside wire" (technically, wire on the customer's side of the demarcation point).[154] It is unnecessary because the Commission has already ruled that the customer has most of the beneficial incidents of ownership of inside wire. The customer may use the wire as it sees fit.[155] So, if the CLEC wants to use inside wire to serve the customer, the CLEC can simply get the customer's consent. However, if the CLEC wants to use the wire without

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[152] *Id.* at 8. *See also* MCI at 47.

[153] Moreover, by seeking access to all ILEC-owned intra-building wiring, the CLECs' requests far exceed the type of limited access that Congress and the Commission has thus far permitted under Title VI of the Communications Act. As Winstar notes (at page 14), Title VI only grants limited access to the "home run wiring" in an MTE owned by an incumbent cable operator. Given the growing "convergence" of technologies across all transmission media – shown most dramatically by AT&T's recent acquisition of TCI and its pending purchase of MediaOne – the Commission cannot reasonably conclude that ILEC-owned wiring is a roadblock to competition. Before the Commission even considers the CLEC's request, it should first address the broader regulatory issues posed by such technological convergence.

[154] Ameritech speculates that this is why Teligent reasonably omitted true inside wire (on the customer's side of the demarcation point) from its request. Indeed, it is probably why Teligent has asked the Commission to increase the amount of this wire by relocating the demarcation point at the MPOE for all MTEs.

[155] *In the Matter of Detariffing the Installation and Maintenance of Inside Wiring*, CC Docket No. 79-105, Memorandum Opinion and Order, 1 FCC Rcd. 1190 at para. 35 (1986).

the customer's consent, Ameritech suggests that the Commission should decline to facilitate the CLEC's efforts since that would directly conflict with what the Commission has already done in giving control over inside wire to the customer. Moreover, there is no public interest that is furthered by giving a CLEC the right to override its potential customer's wishes.

With respect to ILEC-owned wiring between the MPOE and the demarcation point,[156] all claims of CLEC "need" for the facilities are made in general, conclusory terms that in no way demonstrate that the impair standard has been met in all cases on a national basis. For example, WinStar says:

> In many buildings, it is difficult if not impossible for a CLEC to serve individual tenants without access to the house and riser cables and conduit owned by the ILEC...[157] (Emphasis added.)

Similarly, Teligent claims:

> [I]n most customer installations, especially in multi-unit dwellings, competitive LECs will not be able to provide service if they must essentially rewire the building in whole or in part in order to provide service.[158] (Emphasis added.)

And MCI claims:

> [I]t often is infeasible for CLECs to replicate intrabuilding network cable in multi-tenant buildings or on campuses. Even if it were economically feasible to do so, and space existed in the ducts, landlords rarely will agree to provide the necessary access because of the disruption associated with installing redundant parallel cable pairs. [159] (Emphasis added.)

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156 Because the Commission's definition of demarcation point puts it close to the MPOE for individual customers, the wiring between the MPOE and the demarcation point being discussed in this context is "house and riser" cable in MTEs.

157 WinStar at 5.

158 Teligent at 26.

159 MCI at 47.

Even if these claims are taken at face value, they imply that in some buildings and perhaps in many customer installations, it is neither difficult nor impossible for the CLEC to provide its own intrabuilding wiring and that in some cases landlords will agree to provide CLECs with the necessary access to do so.

While Ameritech does not contend that the impair standard for access to ILEC owned intra-MTE wire might never be met, the CLECs simply have not shown that it would be met in such a high percentage of cases that ILEC-owned intra-MTE wiring can be included on the national uniform list of network elements. While it might cost CLECs more to construct their own intrabuilding wiring than it would to obtain it as a network element,[160] the Supreme Court noted specifically that an assumption that *any* increase in cost satisfies the "impair" standard is not consonant with "the ordinary and fair" interpretation of the statutory requirement.[161] Similarly, while there might be cases in which CLECs have difficulty with demanding or uncooperative landlords, there is no evidence before the Commission that those problems are so unmanageable and so widespread that these facilities must be considered a pre-determined network element in all cases.

d. Interoffice Transport.

Many parties ask the Commission to require ILECs to provide unbundled interoffice transport – either dedicated or shared or both – for all wire centers in all

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[160] In an incredible display of wanting to "have its cake and eat it, too," Level 3 (at 27) claims that TELRIC would not be the appropriate basis for charges for this requested UNE. It insists "that there should generally be no charge for access to customer premises wiring as a UNE because in most cases incumbent LECs have already fully depreciated it." Although pricing standards are not in issue in this proceeding, this "TELRIC-or-embedded-cost,-whichever-is-cheaper" position must be rejected as completely arbitrary.

[161] *AT&T*, 119 S. Ct. at 736.

geographic areas. Others seek to add dark fiber as a required network element. Without exception, these parties essentially ask the Commission to avoid even a cursory examination into whether interoffice transport is reasonably and practicably available from sources other than the incumbent LEC. This is a fatal shortcoming, however, because the undisputed evidence in the record establishes that, in many cases, such alternatives exist. Therefore, as a matter of law, unbundled access to interoffice transport cannot be required on a uniform national basis.

1. Dedicated Transport.

As Ameritech's Comments demonstrated, fiber optic interoffice transmission facilities have been deployed by CLECs virtually ubiquitously in dense wire centers serving 40,000 lines or more. CLECs have also widely deployed fiber in many other, and much smaller, markets. In all these markets, CLECs, by their own actions, have conclusively established that access to ILEC interoffice facilities is not necessary to permit a reasonably efficient CLEC to compete viably. Consequently, the Commission could not reasonably conclude that lack of access to ILEC interoffice transmission facilities meets the "impairment" standard: (1) in any wire center serving 40,000 or more lines with existing collocation arrangements, and (2) in *any* central office with collocation if competitive transport facilities have actually been deployed in the wire center serving area.[162]

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[162] Even if a CLEC has not yet obtained collocation in a particular end office, access to ILEC interoffice transmission facilities would not satisfy the impairment standard if collocation is available in the wire center and a CLEC has deployed alternative interoffice transmission facilities in the wire center serving area because those facilities could quickly and easily be extended to the wire center itself.

Notwithstanding the overwhelming evidence concerning the availability of alternative sources of interoffice transport, most CLEC commenters ask the Commission to include dedicated transport on a uniform national list of network elements for *all* wire centers. They attempt to justify their request by offering nothing more than conclusory assertions unbundling dedicated transport would encourage competitive entry by helping to make it more efficient and less costly.[163] These claims, however, do nothing to support CLEC demands for unbundled dedicated transport because they do not address whether a unbundling dedicated transport would satisfy the statutory "impair" standard. As the Supreme Court held, that standard is not met simply because the TELRIC rate for an unbundled element would be lower than an alternative source of supply. Rather, it is met only if a reasonably efficient competitor could not earn a competitive return on capital by providing the services it seeks to offer using alternative sources of supply (including self-provision). The undisputed facts are that alternative sources of dedicated interoffice transport exist in a significant number of wire centers. Thus, the CLECs' broadbrush claims of need, contradicted by the facts, should be given no weight in the Commission's analysis of whether dedicated transport satisfies the impairment standard.

Other commenters offer more detailed, albeit equally unavailing, analyses. For example, MCI WorldCom admits that competitive provision of dedicated transport occurs in a significant number of cases:

> Alternative providers have focused their investments on one type of link – the "entrance facility" between a CLEC switch and an ILEC end office...Our records show that we can self-provision transport to just over 400 ILEC end offices...We

[163] *See e.g.* Cable & Wireless at 37-38, ALTS at 52, CompTel at 42-43, RCN at 17, e.spire/Intermedia at 25.

> also can purchase transport from other CLECs and CAPs to reach approximately 1,200 additional ILEC end offices...[164]

MCI WorldCom offers these statements in support of its argument that "there currently are few competitive alternatives for most dedicated transport routes."[165] In other words, MCI WorldCom acknowledges that there are some competitive alternatives for some geographic markets, but asks the Commission to require ILEC to unbundle dedicated transport across the board – without regard to the market facts, claiming: [T]here is little need for regulation that protects against unnecessary leasing, and there is no harm in a regulation that is marginally overinclusive.[166]

In effect, MCI WorldCom claims that, almost always, a CLEC will only request dedicated transport where it is really necessary and the instances in which it is not necessary are so few that there is "no harm" in requiring the ILEC-provision of a dedicated transport UNE in those instances. This, however, effectively imbues CLECs, rather than the Commission, with the authority to determine whether the failure to obtain access to a nonproprietary element would impair the CLEC's ability to provide services. This would not be a "limiting standard." In fact, the Supreme Court found this very aspect of the Commission's prior "used and useful" version of the "necessary and impair" test to be contrary to the terms of section 251(d)(2).[167] In short, MCI WorldCom's rationale would have the Commission ignore the availability of alternative sources of

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164 MCI WorldCom at 64.

165 *Id.*

166 *Id.* at 65.

167 *AT&T* 119 S. Ct. at 735.

supply – something that the Supreme Court said that the Commission could not do.[168] For these reasons, no weight must be given to MCI WorldCom's arguments.

AT&T takes a different path. The world-wide telecommunications conglomerate goes on for page after page to support its contention of what is probably uncontested – that access to ILEC-provided dedicated transport would save CLECs time and money.[169] Yet AT&T's argument suffers from two flaws. First, like MCI WorldCom, AT&T ignores the Supreme Court's instruction that there must be a limiting standard, which requirement is not satisfied by the assumption that "*any* increase in cost (or decrease in quality)" meets the test.[170] Second, AT&T's claim is belied by the facts.

The facts show that alternative facilities exist in many places, that collocation arrangements are proliferating, and that competitive fiber networks are growing. Indeed, AT&T itself concedes that it obtains 18 percent of its transport from competitive suppliers.[171] Likewise, Ameritech has already shown the substantial size of competitive fiber networks in its major metropolitan areas and the extent to which collocation arrangements (which are easily used for competitive dedicated transport arrangements for traffic to and from the collocation office) are being deployed – especially in large wire centers.[172] And MFN, one of those competitive suppliers, touts its services and facilities as "extremely high-bandwidth, fiber optic communications infrastructure, including

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168 *Id.*

169 AT&T at 111-123.

170 *AT&T* 119 S. Ct. at 735. Of course "decrease in quality" can be read to include any timing delay that might result from self-provisioning.

171 AT&T at 122.

172 Ameritech Comments at 89-93.

"dark" fiber."[173] The Public Utilities Commission of Ohio ("PUCO"), which review the market facts in Ohio, reported that alternative dedicated transport is available in many cases and, therefore, recommended against its inclusion on a uniform national list of unbundled network elements.

Thus, like MCI WorldCom, AT&T would have the Commission ignore the Supreme Court's admonition: "The Commission cannot, consistent with the statute, blind itself to the availability of elements outside the incumbent's network."[174] In light of the Court's command, the market facts alone facts alone, of necessity, preclude the Commission from including dedicated transport on a national uniform list of network elements.[175]

2. Shared Transport.

As Ameritech demonstrated in its Comments, shared transport fails the impair test. The three concerns that led the Commission to conclude in the *Third Order on Reconsideration* that failure to gain access to shared transport would impair new entrants' ability to enter the local marketplace are addressed by Attachment A to Ameritech's Comments.[176] First, CLECs are not required to order dedicated facilities based upon a guess at future traffic volumes at the outset of their service, nor are they penalized for a miscalculation. Second, alternate arrangements are available that are economical, even a

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173 MFN at 1.

174 *AT&T* 119 S. Ct. at 735.

175 PUCO at 9-11.

176 On June 1, 1999, the Supreme Court vacated the Eighth Circuit Court of Appeals's decision affirming the *Third Order on Reconsideration. See Ameritech v. Federal Communications Commission*, No. 98-1381, order granting petition for certiorari, vacating judgment and remanding for further consideration.

low penetration levels. Third, there are no transaction costs as a CLEC adds new customers at low volume levels.

There is nothing in the comments that refutes the facts presented by Ameritech. For example, the comments of AT&T and MCI/WorldCom offer a flawed analysis based upon the circular argument that local switching meets the necessary and impair test because, they claim, they require access to shared transport.[177] Such bootstrapping is impermissible. As noted by the PUCO:

> under the Ohio Commission's recommendation to exclude local switching from the FCC's standard list of unbundled network elements, the provision of shared transport as an UNE would be rendered academic unless a proper demonstration is made to rebut the presumption that switching not be provided as a UNE.[178]

Thus, where switching does not meet the necessary and impair test, incumbent LECs are not required to offer shared transport.

Even if switching somehow does meet the necessary and impair test in some areas, CLECs still have not demonstrated that shared transport does. AT&T argues that shared transport is necessary because new entrants lack the experience to deploy their own routing and network as efficiently as incumbent LECs, and that they lack the "data or traffic volumes and routing patterns needed to design an efficient network."[179] AT&T therefore asserts that they will "likely end up with service that either has more blocking than the incumbent LEC (because CLECs purchase too few trunks) or that costs more than the traffic warrants."[180] MCI/WorldCom adds that failure to gain access to

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177 AT&T at 97-100, MCI/WorldCom at 62-63.

178 PUCO at 11.

179 *See e.g.* AT&T at 97-98.

180 *Id.* at 99.

shared transport would mean that the CLEC would have to "either build or lease dedicated circuits to duplicate the entire ILEC local transport network." (MCI WorldCom at 62.)

First, it is simply not credible that these large and sophisticated carriers lack the expertise and capital to design and install an efficient alternate network.[181] Moreover, AT&T and MCI WorldCom's analysis must be rejected because it is based upon the false assumption that the only alternative to shared transport is a dedicated transport network that completely duplicates the incumbent LEC's network. Again, they are simply wrong when they assert that there is no alternative to shared transport, except for a dedicated alternate network.

A new entrant does not have to duplicate the incumbent's entire network. Rather, the 1996 Act requires that incumbent LEC's interconnect with requesting carriers under section 251(c)(2), and that they establish "reciprocal compensation arrangements for the transport and termination of telecommunications" under section 251(b)(5). Ameritech's Comments demonstrate that is both technically and economically feasible for a new entrant to establish a network for the transport and termination of traffic from offices where it is subscribing to unbundled local switching from an ILEC, without using the incumbent's proprietary routing tables or entirely duplicating the incumbent's network through the use of dedicated transport. Instead, the entrant can interconnect with the incumbent LEC at its tandem office through the use of custom routing and end office integration and hand the traffic off to the incumbent LEC to terminate to offices where

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[181] These parties' claim is also at odds with their well-funded advertising and marketing campaigns which tout their superior network capabilities (*e.g.*, the WorldCom "OnNet" campaign). Thus, either those conglomerates have filed knowingly false pleadings in this proceeding or are engaging in knowingly deceptive advertising campaign.

the requesting carrier cannot cost justify using dedicated transport or its own facilities. Moreover, the requesting carrier can add dedicated transport and or its own facilities, as traffic develops on its network and it gains knowledge of the most efficient routing patterns. In short, AT&T and MCI WorldCom's claim that shared transport meets the necessary and impair test must be rejected.

3. Dark Fiber.

Several parties have asked the Commission specifically to include dark fiber on a national uniform list of network elements.[182] Apart from the fundamental definitional issue of whether dark transport qualifies as a "network element" (and, as Ameritech's comments demonstrate, it does not),[183] dark fiber has special characteristics that make it highly unlikely that it would pass the statutory "impair" test in any particular context – much less on an *a priori* nationwide, uniform basis.

Of the parties requesting a dark fiber network element, most do not discuss it – *i.e.*, they simply add it to the list of the types of loops or transport they want. Of those parties that take the time to explain why dark fiber -- as dark fiber -- should be considered a required network element, none explains why the failure of an ILEC to provide dark

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[182] *See e.g.* CompTel at 32 ("dark fiber loops"), Cable & Wireless at 38 ("dark fiber transport"), MCI at 67 (transport), ALTS at 43 (loops) and 55 (transport), e.spire/Intermedia at 23 (loops) and 25 (transport), RCN at 24 (transport), and AT&T at 121 (transport). As a practical matter, there is no difference between dark fiber in an interoffice or loop configuration. In both cases, it provides the ability to move a massive amount of traffic or data between two points. For this reason, this discussion of dark fiber as "transport" applies equally to dark fiber connecting an ILEC wire center with an end user premises.

[183] As Ameritech's comments demonstrate, dark fiber, by itself, cannot be a network element because, without electronic equipment at either end, it is incapable of carrying telecommunications.

fiber would impair the requesting carrier's ability to provide service. ALTS merely claims:

> For the same reasons described with respect to "lit" interoffice transport above, requesting carriers' ability to compete materially (sic) has been and will continue to be diminished if unbundling is not required.[184]

ALTS had discussed the "additional delay to market and increased cost structure that would be associated with self-provisioning or obtaining transport from another non-ILEC source."[185] However, it did so in a conclusory manner without any factual support. It then failed to relate the argument to the specific characteristics of dark fiber. Similarly, AT&T speaks in general terms only when it says of the possibility of having to self-provide dark fiber:

> [The] delays and costs would impair a CLEC's ability to offer service, and it is impossible to justify such an enormous waste of time and resources when the incumbent LEC is not using the dark fiber and has no immediate plans to do so.[186]

The test is not, however, whether the ILEC is using the fiber or whether it would otherwise go to waste. The "impair" test has nothing to do with whether CLEC self-provision would involve an "unnecessary duplication" of the ILEC's facilities. This was confirmed by the Supreme Court when it rejected the Commission's refusal to look to potential alternative sources of a requested element because, as the Commission noted,

> Requiring new entrants to duplicate unnecessarily even a part of the incumbent's network could generate delay and higher costs for new entrants, and thereby impede entry by competing local providers and delay competition, contrary to the goals of the 1996 Act.[187]

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184 ALTS at 56.

185 *Id.* at 51.

186 AT&T at 121.

187 *AT&T*, 119 S. Ct. at 734.

And, while ALTS notes that "nearly a dozen states" have required unbundled access to dark fiber transport,[188] all of those cases were decided while the Commission's "used and useful" view of the "impair" standard was in effect.

As noted in Ameritech's comments, the prior interpretation of the standard did little to further the overarching goals of the Act (i) to bring consumers the benefits of meaningful competition, and (ii) to encourage new investment and innovation to accelerate deployment of advanced technologies and services.[189] Requiring ILECs to give CLECs whatever they wanted at bargain basement rates did not bring meaningful competition or encourage new investment. Instead, Ameritech has proposed that the standard should require ILECs to provide access to network elements only to the extent reasonably efficient competitors require such access in order to enter the market in a reasonably timely fashion and earn an economic return on capital over the life of their investment (i.e., a normal economic profit).

Applying this analysis to dark fiber can only lead to the conclusion that lack of access to ILEC dark fiber would not prevent a reasonably efficient competitor from providing services within two years and earning a competitive return.[190] The first part of the analysis must involve a discussion of what dark fiber is and what it is "necessary" for. It goes without saying that dark fiber to the home would not be "necessary" to provide residential POTS. Rather, dark fiber is uniquely suited for carrying large amounts of

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188 ALTS at 51; see also AT&T at 121.

189 Ameritech Comments at 4.

190 CLEC commenters have discussed dark fiber only in general terms and have not provided any specific instance to which the "impair' test can be applied.

traffic or traffic requiring large bandwidth between two discrete points. Its carrying capacity is constrained only by the electronics placed on both ends. Technological developments in electronics have been such that the carrying capacity of a single fiber has increased from the DS3 level (45 Mbps bandwidth -- 672 voice-grade equivalent channels) in the mid-1980's to the current OC192 level (9.952 Gbps bandwidth – 129,024 voice grade equivalent channels). In fact, electronics vendors now offer Dense Wavelength Division Multiplexing ("DWDM") technology that permits the creation of 16-40 channels on a fiber – each of which can carry an OC48 system. Some vendors' equipment will now support OC192 systems on those channels. Forty OC192 systems loaded onto a single fiber would give it 398.08 Gbps of bandwidth enable it to carry the equivalent of 5,160,960 voice grade equivalent channels. Moreover, it is expected that equipment will be available within two years that will enable the placement of 128 OC192 systems on a single fiber. Thus, to the extent that a CLEC "needs" dark fiber between two points, it must contemplate using the facility to provide a service or services that involve a substantial potential revenue stream.

Moreover, in order for a CLEC to "need" dark fiber, other forms of bandwidth-constrained transport available from the CLEC must be inadequate. If the Commission concludes that ILEC dedicated transport must be unbundled under certain circumstances, it would have to conclude that the more standard ILEC transport offerings (voice grade, DS1, DS3, OC3, OC12, OC48) – even as unbundled network elements – are insufficient for the CLEC's purposes before it could require ILECs also to offer unbundled access to dark fiber as well.[191] If the CLEC reasonably anticipates providing services utilizing

[191] If the Commission concludes that dedicated transport is not a required network element, then the dark fiber issue is rendered moot.

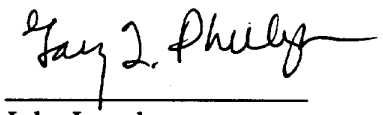
more than OC48 capacity between two points, then the associated substantial potential revenue stream – one greatly in excess of the revenue producing potential of a simple copper loop to a residence customer -- will, as a general matter, provide significant economic justification for competitive provision of the facility.

In its plea for a required dark fiber network element, RCN made a most eloquent statement against its own case:

> Fiber cable is the premier telecommunications transmission facility combining low cost, high capacity, and efficiency.[192]

This is why MFN is in the business of building competitive fiber networks and offering dark fiber in many cities.[193] This is why, as noted above, competitors have built fiber networks extending hundreds of miles in Ameritech's major metropolitan areas.[194] And, quite simply, that is why the Commission must decline to include dark fiber on any national uniform list of network elements.

Respectfully Submitted,



John Lenahan
Gary Phillips
Christopher Heimann
Larry Peck
Michael Pabian
Counsel for Ameritech
1401 H Street, N.W. #1020
Washington, D.C. 20005
(202) 326-3800

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192 RCN at 36.

193 MFN *passim.*

194 Ameritech Comments at 89-91.

CERTIFICATE OF SERVICE

I, Anisa A. Latif, do hereby certify that a copy of **Ameritech Reply** has been served on the parties attached via first class mail – postage prepaid on this 10th day of June 1999.

By: Anisa A Latif
Anisa A. Latif

Ruth Milkman
The Lawler Group
Counsel for Allegiance Telecom, Inc.
1909 K Street, NW Suite 820
Washington, DC 20006

Robert W. McCausland
Allegiance Telecom, Inc.
1950 Stemmons Freeway, Suite 3026
Dallas, TX 75207

Mary C. Albert
Allegiance Telecom, Inc.
1100 15th Street, NW, Suite 200
Washington, DC 20005

David W. Carpenter Mark E. Haddad
Peter D. Keisler Michael J. Hunseder
Scott M. Bohannon Rudolph M. Kammerer
Sidley & Austin - Attorneys for AT&T Corp.
1722 Eye Street, NW
Washington, DC 20006

Mark C. Rosenblum Roy E. Hoffinger
Elaine McHale Stephen C. Garavito
Richard H. Rubin
AT&T Corp.
295 North Maple Avenue
Basking Ridge, NJ 07920

Lee Selwyn
Economics and Technology, Inc.
Consultants for Ad Hoc Telecommunications Users Committee
One Washington Mall
Boston, MA 02108

James S. Blaszak Andrew Brown Colleen Boothby
Levine, Blaszak, Block & Boothby, LLP
Counsel for Ad Hoc Telecommunications Users Committee
2001 L Street, NW, Suite 900
Washington, DC 20036

Jonathan Askin
The Association for Local Telecommunications Services
888 17th Street, NW, Suite 900
Washington, DC 20006

Jonathan E. Canis John J. Heitmann
Kelley Drye & Warren, LLP
Counsel for The Association for Local Telecommunications Services
1200 19th Street, NW, 5th Floor
Washington, DC 20036

M. Robert Sutherland Jonathan B. Banks
Attorneys for BellSouth Corporation
1155 Peachtree Street, NE, Suite 1800
Atlanta, GA 30309

Michael E. Glover James G. Pachulski
Attorneys for Bell Atlantic Telephone Companies
1320 North Court House Road
8th Floor
Arlington, VA 22201

Douglas E. Hart
Frost & Jacobs, LLP
Attorney for Cincinnati Bell Telephone Company
2500 PNC Center
201 East 5th Street
Cincinnati, OH 45202

Eric J. Branfman
Michael R. Romano
Swidler Berlin Shereff Friedman, LLP
Counsel for CoreComm Limited
3000 K Street, NW, Suite 300
Washington, DC 20007

Laura H. Phillips J.G. Harrington
Barbara S. Esbin
Dow, Lohnes & Albertson, PLLC
Attorneys for Cox Communications, Inc.
1200 New Hampshire Ave, NW, Suite 800
Washington, DC 20036

Alan G. Fichel
Arent Fox Kintner Plotkin & Kahn
Attorneys for CO Space Services, Inc.
1050 Connecticut Avenue, NW
Washington, DC 20036

Rachel J. Rothstein
Brent Olson
Cable & Wireless USA, Inc.
8219 Leesburg Pike
Vienna, VA 22182

Danny E. Adams Rebekah J. Kinnett
Brian D. Hughes
Kelley Dyre & Warren, LLP
Attorneys for Cable & Wireless USA, Inc.
1200 19th Street, NW, Suite 500
Washington, DC 20036

Thomas M. Koutsky
James D. Earl
Covad Communications Company
700 13th Street, NW, Suite 950
Washington, DC 20005

Kenneth E. Hardman
Moir & Hardman
Attorney for Columbia Telecommunications, Inc.
d/b/a aXessa
1828 L Street, NW, Suite 901
Washington, DC 20036

Ronald Binz
Debra Berlyn
Competition Policy Institute
1156 15th Street, NW, Suite 520
Washington, DC 20005

Donald W. Downes Glenn Arthur
Jack R. Goldberg John W. Betkoski, III
Linda Kelly Arnold
Connecticut Department of Public Utility Control
Ten Franklin Square
New Britain, CT 06051

Jonathan E. Canis Edward A. Yorkgitis, Jr.
Michael B. Hazzard
Kelley Drye & Warren, LLP
Counsel for E.spire & Intermedia Cmmunications I
1200 19th Street, NW, 5th Floor
Washington, DC 20036

Robert J. Aamoth
Kelley Drye & Warren, LLP
Cousel for Excel Communications, Inc.
1200 19th Street, NW, Suite 500
Washington, DC 20036

Richard Metzger
Focal Communications Corporation
1120 Vermont Avenue, NW
Washington, DC 20005

Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399

William P. Barr
M. Edward Whelan
GTE Service Corporation
1850 M Street, NW, Suite 1200
Washington, DC 20026

Ward W. Wueste, Jr.
Thomas R. Parker
GTE Service Corporation
1255 Corporate Drive
Irving, TX 75038

Steven G. Bradbury Paul T. Cappuccio
Patrick F. Philbin John P. Frantz
Kirkland & Ellis
Cousel for GTE Service Corporation
655 15th Street, NW
Washington, DC 20005

Jeffrey S. Linder
Suzanne Yelen
Wiley, Rein & Felding
Cousel for GTE Service Corporation
1717 K Street, NW
Washington, DC 20006

Russell M. Blau Patrick J. Donovan
Swidler Berlin Shereff Friedman, LLP
Counsel for Choice One Communications, Network Plus, Inc., GST Telecom, Inc., & CTSI, Inc.
3000 K Street, NW, Suite 300
Washington, DC 20007

Snavely King Majoros O'Connor & Lee, Inc.
Economic Consultants for General Services Administration
1220 L Street, NW, Suite 410
Washington, DC 20005

Karlyn D. Stanley
Cole, Raywid & Braverman, LLP
Attorney for Centennial Cellular Corp.
1919 Pennsylvania Avenue, NW Suite 200
Washington, DC 20006

George N. Barclay
Michael J. Ettner
General Services Administration
1800 F Street, NW, Room 4002
Washington, DC 20405

Lourdes Lucas
Centennial Cellular Corporation
1305 Campus Parkway
Neptune, NJ 07753

Fiona J. Branton
Information Technology Industry Council
1250 Eye Street, NW, Suite 200
Washington, DC 20005

Mark J. Burzych
Foster, Swift, Collins & Smith, PC
Counsel for Centennial Cellular Corp.
313 South Washington Square
Lansing, MI 48933

Colleen Boothby Andrew M. Brown
Levine, Blaszak, Block & Boothby, LLP
Counsel for Information Technology Industry Council
2001 L Street, NW, Suite 900
Washington, DC 20036

Susan W. Smith
Centurytel Wireless, Inc.
3505 Summerhill Road
No. 4 Summer Place
Texarkana, TX 75501

Myra Karegianes
Illinois Commerce Commission
160 North LaSalle, Suite C800
Chicago, IL 60601

Kenneth E. Hardman
Moir & Hardman
Attorney for Trillium Cellular Corporation
1828 L Street, NW, Suite 901
Washington, DC 20036

Diane C. Munns Johanna Benson
William H. Smith, Jr.
Iowa Utilities Board
350 Maple Street
Des Moines, Iowa 50319

Michael J. Travieso
Theresa V. Czarski
Office of People's Counsel
6 St. Paul Street, Suite 2102
Baltimore, MD 21202

Phillip F. McClelland Joel H. Cheskis
Counsel for Irwin A. Popowsky – Consumer Advocate
Office of Consumer Advocate
555 Walnut Street, 5th Floor
Forum Place
Harrisburg, PA 17101

David Bergmann
Ohio Consumer's Counsel
77 South High Street, 15th floor
Columbus, OH 43266

William Vallee, Jr.
Connecticut Office of Consumer Counsel
10 Franklin Square
New Britain, CT 06051

Patrick J. Donovan
James N. Moskowitz
Swidler Berlin Shereff Friedman, LLP
Counsel for KMC Telecom, Inc.
3000 K Street, NW, Suite 300
Washington, DC 20007

William P. Hunt, III
Level 3 Communications, Inc.
1450 Infinite Drive
Louisville, CO 80027

Russell M. Blau
Tamar E. Finn
Swidler Berlin Shereff Friedman, LLP
Counsel for Level 3 Communications, Inc.
3000 K Street, NW, Suite 300
Washington, DC 20007

Glenn B. Manishin
Blumenfeld & Cohen – Technology Law Group
Counsel for Low Tech Designs, Inc.
1615 M Street, NW, Suite 700
Washington, DC 20036

James M. Tennant, President
Low Tech Designs, Inc.
1204 Saville Street
Georgetown, SC 29440

David R. Conn
McLeodUSA Telecommunications Services, Inc.
McLeodUSA Technology Park
6400 C Street SW
Cedar Rapids, IA 52406

Susan M. Eid Tina S. Pyle
Richard A. Karre
MediaOne Group, Inc.
1919 Pennsylvania Avenue, NW, Suite 610
Washington, DC 20006

Kent F. Heyman Scott A. Sarem
Richard E. Heatter
MGC Communications, Inc.
3301 N. Buffalo Drive
Las Vegas, NV 89129

Donald B. Verrilli, Jr. Mark D. Schneider
Maureen F. Del Duca Douglas H. Hsiao
Thomas D. Amrine Jeffrey I. Ryen
Jenner & Block - Counsel for MCI Worldcom, Inc.
601 13th Street, NW
Washington, DC 20005

Lisa B. Smith
Charles Goldfarb
MCI Worldcom, Inc.
1801 Pennsylvania Avenue, NW
Washington, DC 20006

Lonn Beedy
Metro One Telecommunications, Inc.
8405 SW Nimbus Avenue
Beaverton, OR 97008

Michelle W. Cohen
Paul, Hastings, Janofsky & Walker, LLP
Attorneys for Metro One Telecommunications, Inc.
1299 Pennsylvania Avenue, NW, 10th Floor
Washington, DC 20004

Jonathan E. Canis
Michael B. Hazzard
Kelley Drye & Warren, LLP
Counsel for Metromedia Fiber Network Services, Inc.
1200 19th Street, NW
Washington, DC 20036

Charles D. Gray James Bradford Ramsay
National Association of Regulatory Utility Commissioners
1100 Pennsylvania Avenue, Suite 603
P.O. Box 684
Washington, DC 20044

Daniel M. Waggoner
Robert S. Tanner
Davis Wright Tremaine LLP
Counsel for Nextlink, Communications, Inc.
1155 Connecticut Avenue, NW, Suite 700
Washington, DC 20036

R. Gerard Salemme
Daniel Gonzalez
Nextlink Communications, Inc.
1730 Rhode Island Avenue, NW, Suite 1000
Washington, DC 20036

Scott Sawyer
New England Voice & Data, LLC
222 Richmond Street, Suite 206
Providence, RI 02903

Brian Conboy Thomas Jones
Gunnar Halley
Willkie Farr & Gallagher
Attorneys for New England Voice & Data, LLC
3 Lafayette Centre - 1155 21st Street, NW
Washington, DC 20036

Rodney L. Joyce
J. Thomas Nolan
Shook, Hardy & Bacon
Attorneys for Network Access Solutions, Inc.
600 14th Street, NW, Suite 800
Washington, DC 20005

Brad E. Mutschelknaus Ross A. Buntrock
Edward A. Yorkgitis, Jr. Michael B. Hazzard
Kelley Drye & Warren LLP
Counsel for Net2000 Communications, Inc.
1200 19th Street, NW, 5th Floor
Washington, DC 20036

Ruth Milkman
The Lawler Group, LLC
Counsel for Northpoint Communications, Inc.
1909 K Street, NW, Suite 820
Washington, DC 20006

Steven Gorosh
Kevin Cameron
Northpoint Communications, Inc.
222 Sutter Street, Suite 700
San Francisco, CA 94108

Lawrence G. Malone
New York State Department of Public Service
3 Empire State Plaza
Albany, NY 12223

Michael E. Katzenstein
OpTel, Inc.
1111 W. Mockingbird Lane
Dallas, TX 75247

Kenneth Ferree
Goldberg, Godles, Wiener & Wright
Attorneys for Optel, Inc.
1229 19th Street, NW
Washington, DC 20036

Chairman Ron Eachus
Commissioner Joan H. Smith
Commissioner Roger Hamilton
Oregon Public Utility Commission
550 Capitol Street NE
Salem, OR 97310

William L. Willis Deborah T. Eversole
Amy E. Dougherty
Counsel for Public Service Commission of Kentucky
730 Schenkel Lane
Post Office Box 615
Frankfort, KY 40602

Chairman Pat Wood Commissioner Judy Walsh
Commissioner Brett A. Perlman
Public Utility Commission of Texas
1701 N. Congress Avenue
P.O. Box 13326
Austin, TX 78711

Walter Steinel, Jr.
Marjorie K. Conner Edwin G. Kichline
Hunton & Williams
Counsel for Pilgrim Telephone, Inc.
1900 K Street, NW
Washington, DC 20006

Peter Arth, Jr. Lionel Wilson
Ellen S. Levine
Attorneys for the People of the State of California and the California Public Utilities Commission
505 Van Ness Ave.
San Francisco, CA 94102

Steven T. Nourse
Public Utilities Section
180 E. Broad Street
Columbus, OH 43215

Randall B. Lowe Renee Roland Crittendon
Julie A. Kaminski J. Todd Metcalf
Piper & Marbury, LLP
Counsel for Prism Communication Services, Inc.
1200 19th Street, NW, Suite 700
Washington, DC 20036

Genevieve Morelli
Paul F. Gallant
Qwest Communications Corp.
4250 N. Fairfax Drive
Arlington, VA 22203

Linda L. Oliver Jennifer A. Purvis
Yaron Dori
Hogan & Hartson, LLP
Counsel for Qwest Communications Corp.
555 13th Street, NW
Washington, DC 20004

Glenn B. Manishin Elise P. Kiely
Frank V. Paganelli Lisa N. Anderson
Blumfield & Cohen – Technology Law Group
Counsel for Rhythms NetConnections Inc.
1615 M Street, NW, Suite 700
Washington, DC 20036

Margot Smiley Humphrey
Koteen & Naftalin, LLP
Counsel for NRTA
1150 Connecticut Avenue, NW, Suite 1000
Washington, DC 20036

L. Marie Guillory
Jill Canfield
NTCA
4121 Wilson Boulevard, 10th Floor
Arlington, VA 22203

Kathleen A. Kaercher
Stuart Polikoff
OPASTCO
21 Dupont Circle, NW, Suite 700
Washington, DC 20036

Joseph A. Kahl
RCN Telecom Services, Inc.
105 Carnegie Center
Princeton, NJ 08540

Andrew D. Lipman
James N. Moskowitz
Swidler Berlin Shereff Friedman, LLP
Counsel for RCN Telecom Services, Inc.
3000 K Street, NW, Suite 300
Washington, DC 20007

David V. Dimlich
Supra Telecom
2620 SW 27th Avenue
Miami, FL 33133

Leon M. Kestenbaum
Jay C. Keithley H. Richard Juhnke
Sprint Corporation
1850 M Street, NW, 11th Floor
Washington, DC 20036

Robert M. Lynch Roger K. Toppins
Michael J. Zpevak Kathleen E. Palter
SBC Communications, Inc.
One Bell Plaza, Room 3703
Dallas, TX 75202

Michael K. Kellogg
Rachael E. Selinfreund
Kellogg, Huber, Hansen, Todd & Evans, PLLC
Counsel for SBC Communications, Inc.
1301 K Street, NW, Suite 1000 West
Washington, DC 20005

Strategic Policy Research
7979 Old Georgetown Road
Suite 700
Bethesda, MD 20814

Charles C. Hunter Catherine M. Hannan
Hunter Communications Law Group
Attorneys for Telecommunications Resellers Association
1620 Eye Street, NW, Suite 701
Washington, DC 20006

Leonard J. Kennedy
Loretta J. Garcia
Dow, Lohnes & Albertson, PLLC
Counsel for TelTrust, Inc.
1200 New Hampshire Avenue, NW
Washington, DC 20036

Steven P. Goldman
Deborah M. Barrett
TelTrust, Inc.
6322 South 3000 East
Salt Lake City, UT 84121

Laurence E. Harris David S. Turetsky
Terri B. Natoli Carolyn K. Stup
Teligent, Inc.
8065 Leesburg Pike, Suite 400
Vienna, VA 22182

Phillip L. Verveer
Gunnar D. Halley
Willkie Farr & Gallagher
Attorneys for Teligent, Inc.
3 Lafayette Centre – 1155 21st Street, NW
Washington, DC 20036

William T. Lake William R. Richardson, Jr.
Samir Jain David M. Sohn Todd Zubler
Wilmer, Cutler & Pickering
Counsel for US West, Inc.
2445 M Street, NW
Washington, DC 20037

Robert B. McKenna
US West, Inc.
1020 19th Street, NW
Washington, DC 20036

Lawrence E. Sargent Keith Townsend
Linda Kent John W. Hunter Julie E. Rones
United States Telephone Association
1401 H Street, NW, Suite 600
Washington, DC 20005

Jeffrey L. Sheldon
UTC
1140 Connecticut Avenue, NW, Suite 1140
Washington, DC 20036

David C. Farnsworth
Vermont Public Service Board
Drawer 20
Montpelier, VT 05620

Lowell Feldman
Bill Magness
Waller Creek Communications, Inc.
1801 N. Lamar, Suite M
Austin, TX 78701

Robert Berger
Russell Merbeth Barry Ohlson
WinStar Communications, Inc.
1146 19th Street, NW, Suite 200
Washington, DC 20036

Russell M. Blau
William L. Fishman
Swidler Berlin Shereff Friedman, LLP
Counsel for WinStar Communications, Inc.
3000 K Street, NW, Suite 300
Washington, DC 20007

Chairwoman Marilyn Showalter
Commissioner Richard Hemstad
Commissioner William R. Gillis
Washington Utilities & Transportation Commission
1300 South Evergreen Park Drive, SW
Olympia, WA 98504